



**City of Houston**

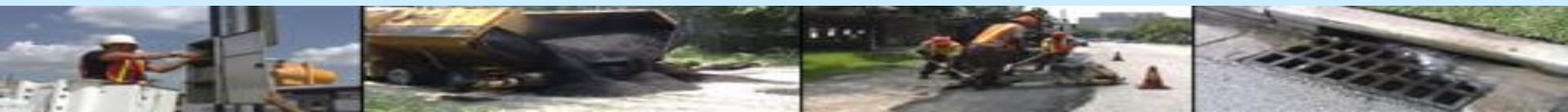
City of Houston Online Information Center for Employees

**Department of Public Works and Engineering**



**Public Works and Engineering > Street & Drainage Division**

# Street & Drainage Division

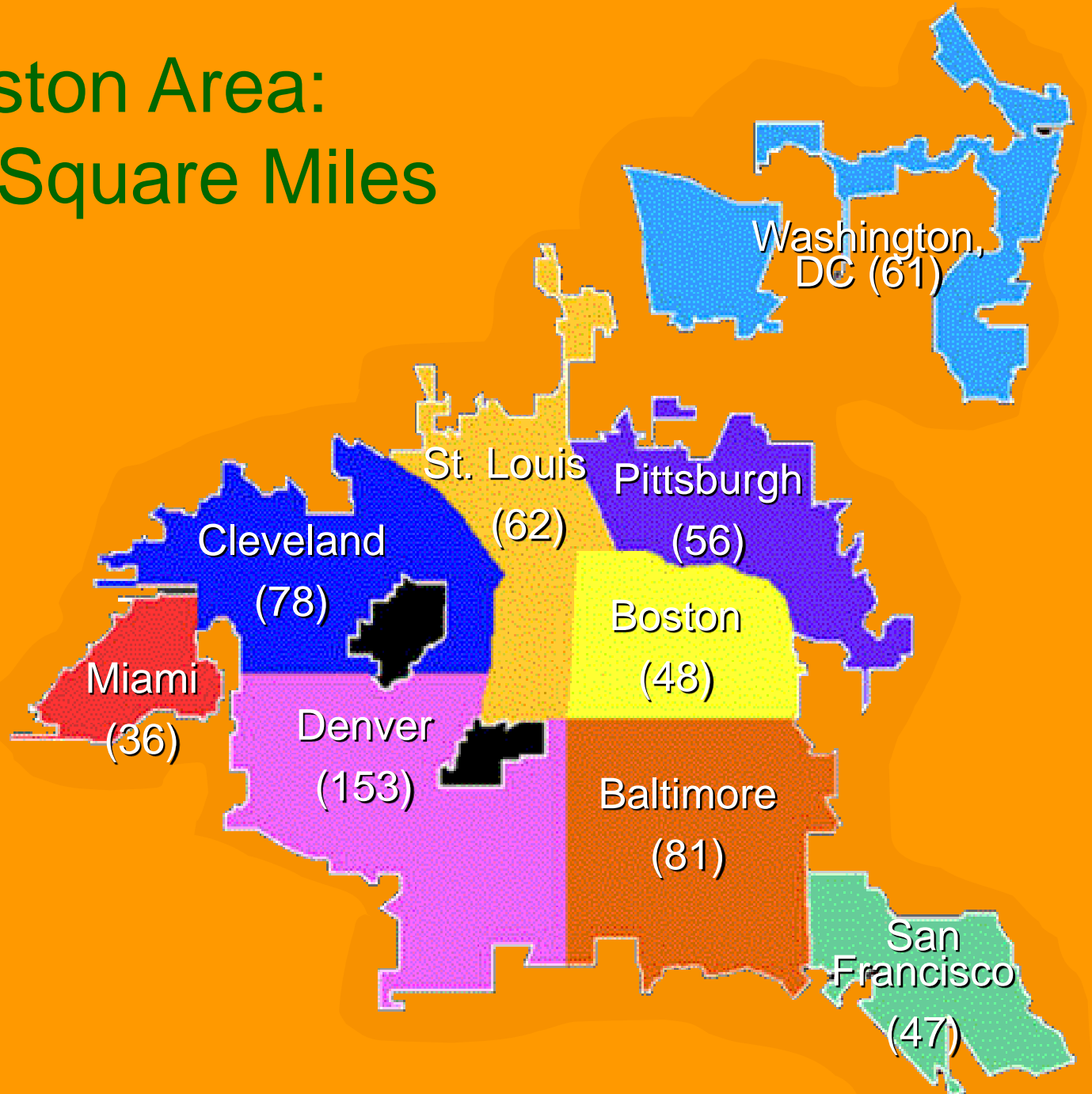


# Houston Population: Over 2.1M



The populations of all these cities COMBINED would fit within our population. Estimate as of 1-1-2010

# Houston Area: 650 Square Miles



The land area of all these cities COMBINED would fit within Houston's land area.



# DEPARTMENTAL



## PWE Mission Statement

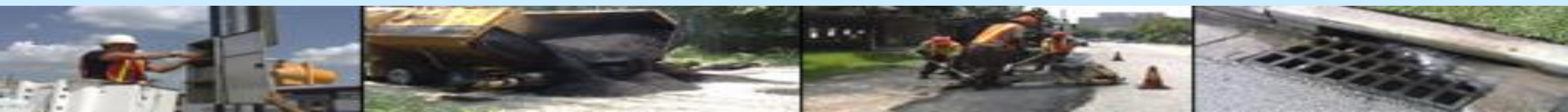
**Plan, design, construct, operate and maintain Houston's public infrastructure systems to provide drinking water, wastewater treatment, storm water drainage and streets; establish and enforce the City's building and development codes; all in a responsive, effective, efficient and responsible manner to serve our customers.**

## PWE Vision Statement

**Be a rock solid, responsive and respected organization for Houston and be the premier public works department in the United States.**

## PWE Values Statement

**Commitment to excellence through continuous improvement, competence, innovation, courage, trustworthiness, integrity, selfless service and teamwork.**





### Public Works and Engineering > Street & Drainage Division

## Mission

To deliver quality service, in a safe and timely manner, that provides for the smooth operation and high-level maintenance of streets, bridges, and storm water infrastructure in the city's rights-of-way.

## Goals

1. Be responsive to the requests of the public - 311
2. Be efficient and provide quality service in our daily operation
3. Meet our budget

## Street and Bridge

Maintain a smooth riding surface free of obstacles and debris.

## Storm Water

Maintain the flow of storm water free of debris and foreign objects in order to meet the two year storm.





### Public Works and Engineering > Street & Drainage Division

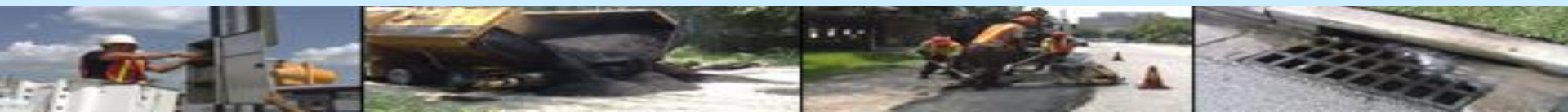
There are three branches within the Street & Drainage Division headed by **Deputy Director Eric K. Dargan**

These Branches are:

- The Administrative Branch, currently **Vacant**
- The Storm Water Maintenance Branch, led by **Assistant Director Michael G. Hogan**
- The Street and Bridge Maintenance Branch, led by **Assistant Director Diane Lowery-Binnie**

Operating budget approximately \$76 million

Personnel over 700 Employees





# Street & Drainage Division

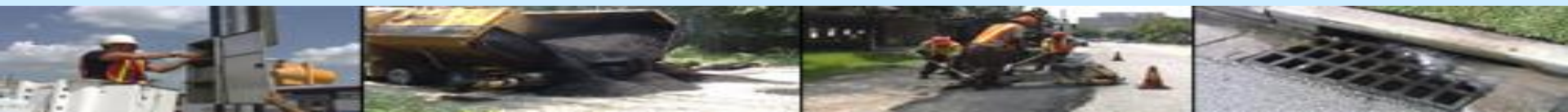
## 311 Requests

- Receives
- Dispatches
- Investigates
- Responds

Maintains 24/7 dispatch/hotshot operation.

- Responds to urgent requests.

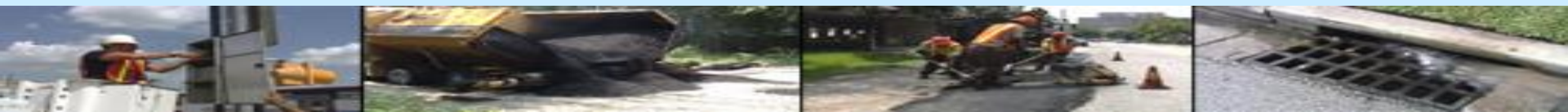
Number of 3-1-1 SR's	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>
Work Orders	36,049	38,840	35,752	35,596





# Storm Water Maintenance Branch

- Roadside/Off-road Ditch Maintenance
- Storm Sewer Maintenance
- Storm Water Quality Enforcement TPDES (Texas Pollutant Discharge Elimination System)
- Technical Services







## Storm Water Maintenance Branch



- **Responsible for maintenance of:**
  - 3,600+ Miles of Roadside Ditches
  - 3,500+ Miles of Storm Gravity Mains
  - 110,000+ Storm Drainage Inlets
  - 76,000+ Storm Water Manholes
  - 62+ Miles of Off-Road Major Drainage Ditches
  - 15 Storm Water Detentions Basins
- **Road Side/Off Road Ditch Maintenance Section(s)**
  - Desilt and regrade drainage ditches
  - Flush culverts under driveways and streets
  - Monitor storm water collection
  - Maintain COH detention basins/ponds



## Storm Water Maintenance Branch



- **Storm Sewer Maintenance Section:**
  - Clean manholes and inlets and replaces missing manhole covers
- **Technical Services Section**
  - Inspect new and rehabilitated storm sewer systems and components
- **Storm Water Quality Enforcement Section**
  - Monitor & inspect runoff to prevent pollutants from entering streams and bayous
  - Work in support of the city's Texas Pollutant Discharge Elimination System (TPDES) Storm Water Permit

# Roadside Ditch Maintenance

Cutting Ditch for Grading



**Roadside Ditch Desilted/Regraded (275 miles annually)**





# Off Road Ditch Maintenance

- Close up of side mowers; note each mower is cutting at a staggered level. This makes mowing large easements/off road ditches faster and more efficient.
- Major Ditches Inspected (244 miles annually)
- Off Road Drainage Easements Mowing (3 cycles annually)





# Storm Sewer Maintenance

## Beam Top Repair

- Inlet/Manhole Maintenance (40,000 annually)
- Storm Sewer Lines/Leads Inspected (240 miles annually)





# Storm Sewer Man Entry Inlet Cleaning With Vacuum Truck

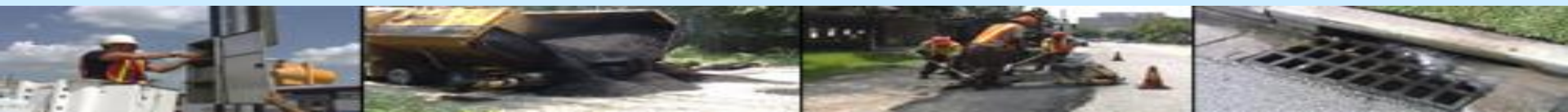




## Technical Services Section

### Drainage Assessments

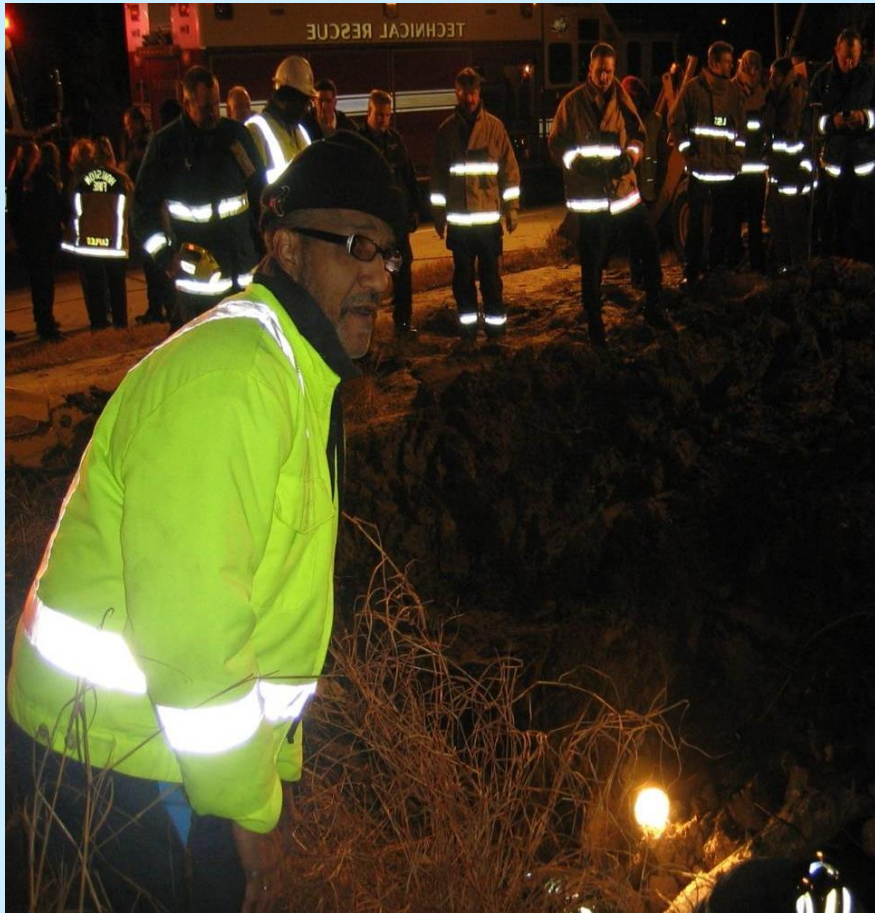
- Event driven or requested by other entities.  
(e.g. Structural Flooding or Engineer's Request)
- Duration is 60 days from the initial request until the Drainage Assessment Summary is complete.





# Technical Services Assistance

Crew called out excavate a horse from a manhole.



# Storm Water Quality Enforcement Section

- Storm water and Spill Prevention Plans
- Manifest
- Industrial Wastewater Permits
- Household Hazardous Waste (650,000 lbs)

## Before



## After





# Storm Water Quality Enforcement Section



**Storm Water Environmental Inspections (1,400 each annually)**



# Storm Water Quality Education

## Adopt-A-Ditch Project





# Storm Water Quality Education

## Acres Homes Adopt-A-Ditch Project Before





# Storm Water Quality Education

## Acres Homes Adopt-A-Ditch Project After





# Storm Water Quality Education

## South Park Adopt-A-Ditch Project Before





# Storm Water Quality Education

## South Park Adopt-A-Ditch Project After





# Storm Water Quality Education

## Clinton Drive SEP Parking Lot Project Before





# Storm Water Quality Education

## Clinton Drive SEP Parking Lot Project After





# Storm Water Quality Education

## Alameda Plaza Adopt-A-Ditch Project

### Before





# Storm Water Quality Education

## Alameda Plaza Adopt-A-Ditch Project After

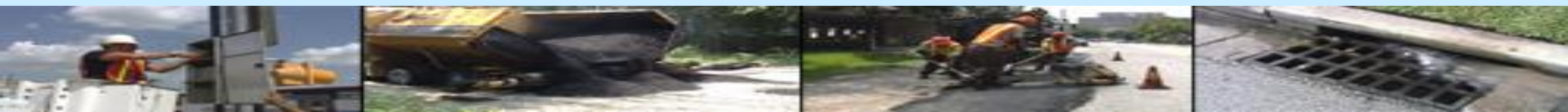






## Street and Bridge Maintenance Branch

- Bridge Maintenance
- General Maintenance
- Specialized Maintenance





# Street and Bridge Maintenance Branch



- **Responsible for maintenance of:**
  - 5,700 center line miles (16,000 lane miles) of roadways
  - 1382 bridges
- **Bridge Maintenance Section:**
  - Inspect bridges as required by TXDOT regulations
  - Provide bridge maintenance and reconstruction





# Street and Bridge Maintenance Branch



- **Specialized Maintenance Section:**
  - Repair potholes and overlaying roadways
  - Inventory of street conditions
- **General Maintenance Section is responsible for:**
  - In-house crews repairing street buckles
  - Sweep the downtown area and major thoroughfares
  - Mow and control the weeds on city streets and drainage rights-of-way





# Bridge Construction

## Woodland Hills Project



Bridges Replaced & Special Projects (8)



# Street Maintenance

## Pot Hole Patchier



Over 60,000 filled per year!





# General Maintenance

## Concrete Repair



Cubic Ft Concrete Street Repaired/Replaced (262,000)



# General Maintenance

## Concrete Repair



# General Maintenance

## Mowing



- Litter Removal (8,500 cu yd. annually)
- Right of Way Mowing (1 cycle annually)



# Specialized Maintenance

## Street Sweeper



Gutters Swept (21,500 miles annually)





# Street Resurfacing







# Technical Components of the Street Surface Assessment Vehicle



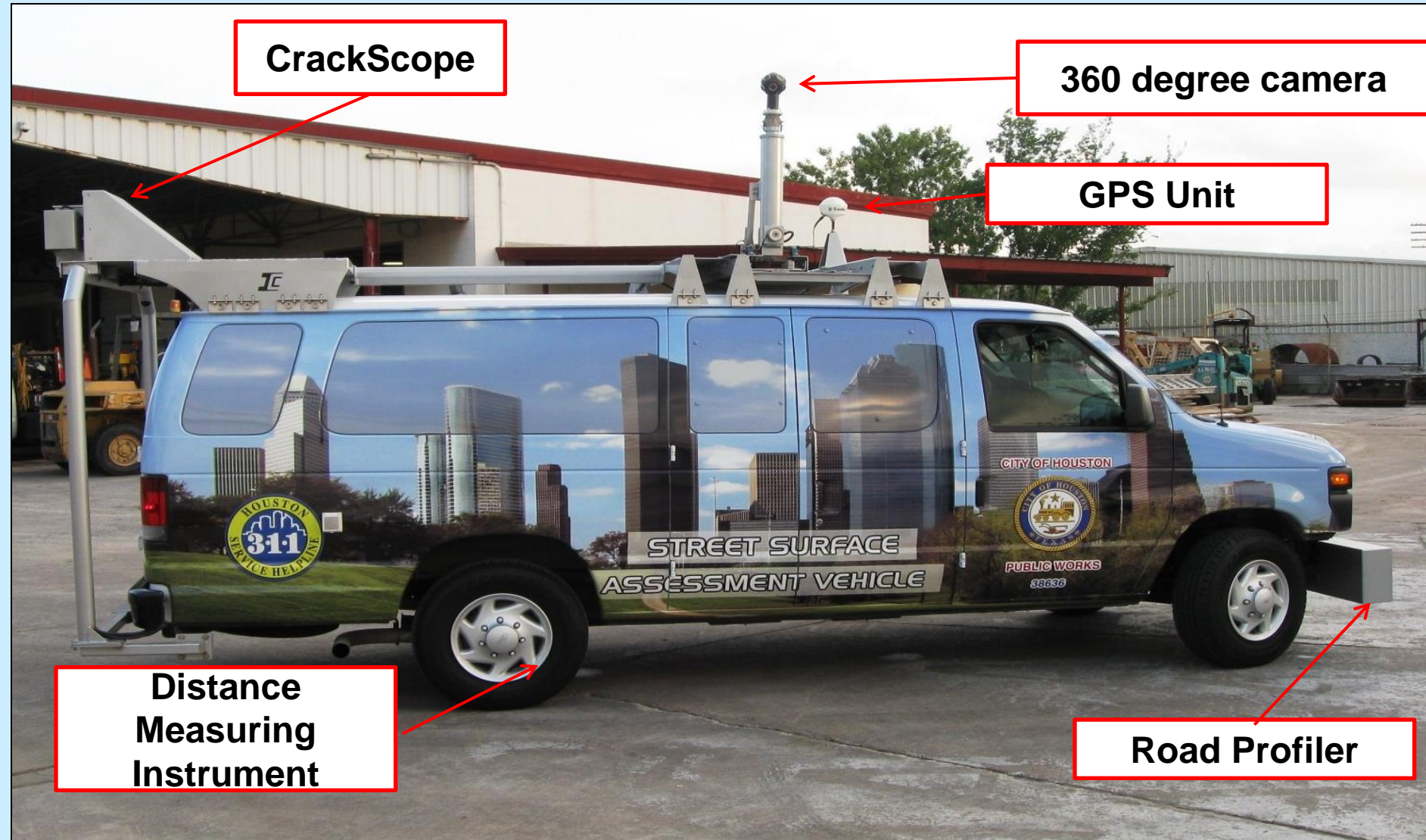
**CrackScope**

**360 degree camera**

**GPS Unit**

**Distance  
Measuring  
Instrument**

**Road Profiler**







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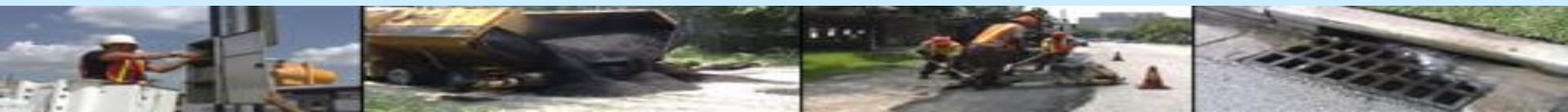
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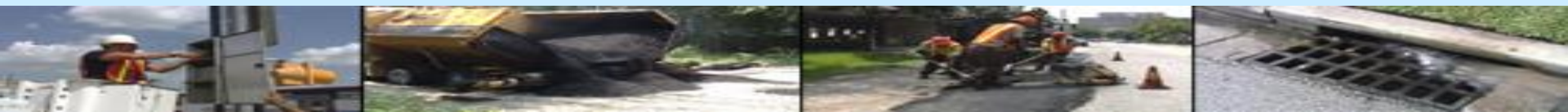
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# Frequently Asked Questions





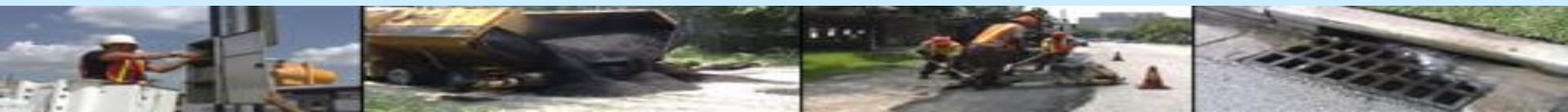
- **There is a pothole on my street that needs to be repaired?**
- **How do I get the alley behind my home repaired?**
- **I need my driveway repaired. How do I get the City to repair it?**
- **My sidewalk is cracked and broken. How do I get it repaired?**
- **The curbs in my neighborhood are cracked and broken. How can I get them repaired?**





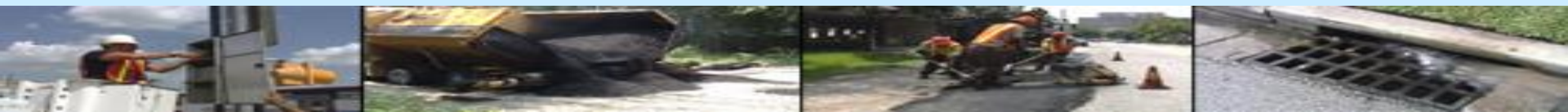


- **How do I report a tree down in the street (storm related)?**
- **How do I get the weeds mowed on the City's easement?**
- **How do I get street lights repaired?**
- **My street floods. How do I get something done about this problem?**
- **I have standing water in front of my house? How do I get something done about this problem?**





- **How do I get the storm sewers in my neighborhood cleaned?**
- **How do I get the roadside ditches on my street cleaned/de-silted?**
- **How do I get the ditch in front of my house covered?**
- **I need culverts set for a driveway. How do I get this done?**







# What can you do to HELP?





# City of Houston

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Department of Public Works and Engineering



Public Works and Engineering > Street & Drainage Division

Contact us at 311/713-837-0311 or email us at:  
[311@houstontx.gov](mailto:311@houstontx.gov)

Android:

[Here is a link to the Android app market](#)

[https://play.google.com/store/apps/details?id=com.seeclickfix.houston311.app&feature=search\\_result](https://play.google.com/store/apps/details?id=com.seeclickfix.houston311.app&feature=search_result)

See news release:

<http://www.click2houston.com/news/New-311-app-used-to-report-potholes-city-issues/-/1735978/17760744/-/m0s9cx/-/index.html>





The following information is needed

Name:

Contact Information:

Issue/Concerns:

Pictures/Videos:

Date, Time and Location:

Web Link: <http://www.publicworks.houstontx.gov/row/index.html>

## We will close the loop!